

CLAIMS

What is claimed is:

1. A method for generating a marked-up document  
5 comprising the steps of:

receiving a digital stream having at least one tone;  
generating a tone symbol document based on the  
digital stream; wherein the tone symbol document includes  
a tone symbol for representing each tone in the digital  
10 stream; and

generating a marked-up document based on the tone  
symbol document.

2. The method of claim 1 wherein the step of receiving  
15 a digital stream having at least one tone includes the  
steps of:

generating a digital audio stream having voice  
information;

generating at least one tone; and  
20 merging the tone with the digital audio stream  
having voice information.

3. The method of claim 1 wherein the step of generating  
at least one tone includes the step of generating a Dual  
25 Tone Multi-Frequency (DTMF) tone.

4. The method of claim 1 wherein the step of generating a tone symbol document based on the digital stream includes the steps of:

converting the voice information into corresponding  
5 text; and  
converting each tone into a corresponding tone symbol.

5. The method of claim 4 wherein the step of converting  
10 each tone into a corresponding tone symbol includes the steps of:

accessing a tone to tone symbol mapping for associating at least one tone with a corresponding tone symbol; and  
15 converting the tone into a corresponding tone symbol based on the tone to tone symbol mapping.

6. The method of claim 1 wherein the step of generating a marked-up document based on the tone symbol document  
20 includes the steps of:

accessing context-based mapping information for specifying at least one mark-up command for a particular context; and  
converting the tone symbol into a corresponding  
25 mark-up command based on the context-based mapping information to generate a context sensitive document.

7. The method of claim 1 wherein the step of generating a marked-up document based on the tone symbol document includes the steps of:

generating one of an XML document, an HTML document,  
5 and other mark-up language document.

8. The method of claim 6 wherein the step of converting the tone symbol into a corresponding mark-up command based on the context-based mapping information to  
10 generate a context sensitive document includes

receiving context information that specifies a first context;

generating a first set of mark-up commands for each tone symbol associated with the first context;

15 receiving context information that specifies a second context; and

generating a second set of mark-up commands for each tone symbol associated with the second context.

20 9. A dictation system comprising:

dictation software for receiving a stream of voice information and responsive thereto for generating text corresponding to the voice information; and

a tone-based mark-up facility for receiving at least  
25 one tone and automatically converting each tone into one or more mark-up commands that operate on the text.

10. The dictation system of claim 9 wherein the tone-based mark-up facility includes

a tone symbol document generator for receiving a digital stream having at least one tone and responsive thereto for generating a tone symbol document having a plurality of words and a tone symbol corresponding to each; and

a mark-up document generator coupled to the tone symbol document generator for receiving the tone symbol document and responsive thereto for automatically generating a marked-up document that has at least one mark-up command that corresponds to the tone symbol.

11. The dictation system of claim 10 wherein the mark-up document generator receives context information and selectively converts each tone symbol into one or more mark-up commands based on the context information.

12. The dictation system of claim 10 wherein the mark-up document generator generates a first mark-up command when the context information specifies a first context and a second mark-up command when the context information specifies a second context.

13. The dictation system of claim 9 further comprising:  
a source for generating tones.

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14. The dictation system of claim 9 further comprising:  
a digital recorder for receiving spoken words and  
generating a corresponding audio digital stream.

5 15. The dictation system of claim 10 wherein the marked-up document is one of an XML document, an HTML document, and other mark-up language document.

16. A system for automatically generating marked-up  
10 documents based on a digital stream having at least one tone comprising:

dictation software for receiving the digital stream  
and responsive thereto for generating corresponding text;  
and

15 a tone-based mark-up facility for receiving the digital stream, converting each tone in the digital stream into a tone symbol, and converting each tone symbol into at least one mark-up command.

20 17. The system of claim 16 wherein the tone-based mark-up facility includes

a tone symbol document generator for receiving  
the digital stream having at least one tone and  
responsive thereto for generating a tone symbol  
25 document having a plurality of words and a tone symbol corresponding to each tone; and

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5 a mark-up document generator coupled to the  
tone symbol document generator for receiving the  
tone symbol document and responsive thereto for  
automatically generating a marked-up document that  
has at least one mark-up command that corresponds to  
the tone symbol.

10 18. The mark-up system of claim 17 wherein the mark-up  
document generator receives context information and  
selectively converts each tone symbol into one or more  
mark-up commands based on the context information.

15 19. The mark-up system of claim 17 wherein the mark-up  
document generator generates a first mark-up command when  
the context information specifies a first context and a  
second mark-up command when the context information  
specifies a second context.

20 20. The dictation system of claim 16 further comprising:  
a source for generating tones; and  
a recorder for receiving spoken words and generating  
a corresponding audio stream.